



# *Case Study - Dartington Tweed Mill*

*Weir and fish pass rebuilt,  
waterwheel reused for  
generation*

*Historic infrastructure  
retained*

## Case Study:

Site: Dartington Tweed Mill  
Turbine: Historic local wheel  
Power: 3kW  
Head: 3.5m

Western Renewable Energy (WRE) won contract to negotiate licenses, design and install electricity equipment and fish pass

Site specific issues include:

- High existing weir with broken fish pass
- Flash river with migratory fish
- Highly public site with full access to all areas



Existing waterwheel has been maintained as amenity for many years, WRE proposed a number of options, the most appropriate being judged to be retention of the wheel with gearbox fitted. The weir required repair as the increased level of abstraction needed to leave the deprived stretch navigable by migratory fish. Space was very limited beside the main road.



The work at the weir included excavation of banks and replacement with concrete and stone banks, as well as bed lowering below weir pools



After completion the reserve flow was being used more efficiently for fish passage, and otter passage was improved by the inclusion of a ramp on the riverside



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Work at the wheel amounted to installation of a new water diverting flap, to allow the water to be easily diverted if required. In the mill an extension shaft was fitted, and gearbox and generator used in the tightly confined mill basement.

